Using the Marketplace to Achieve Conservation and Planning Objectives in Oregon's Dynamic Regulatory Environment

Post-Conference Summary

May 2007

This one-day workshop on transferable development rights (TDRs) and ecosystem services markets at Portland State University drew 30 land-use professionals from urban and rural Oregon. Following is a summary of speakers' important points.

I. Welcome and Workshop Objectives

– Dick Benner, Metro

A moral tale: a farmer and a developer

Imagine there is a farmer who files a Measure 37 claim, seeking the same rights to develop as landowners within the urban growth boundary. There is a developer in the city who can make more money if he can build a few more units. The farmer doesn't really want to subdivide and anger his neighbors, but he wants to retire comfortably. The developer cannot build more units because he is already building to maximum allowable density. Happily, there is a TDR bank that pays the farmer $250,000 for 10 development credits and the farmer can retire without going through a land use application process or subdividing his property. The developer then buys the 10 credits from the TDR bank and builds more units, making more money. In this situation, everyone wins: the farmer and developer win, the community wins because development is located in its proper place, and Oregonians win because the compensation for the preservation did not come from their tax dollars.

Measure 37

Measure 37 threatens to dismantle one of the great successes of Oregon's thirty-five year old planning system: controlling sprawl. Inter-jurisdictional transfers of development rights and ecosystem service markets offer a way to temper this threat. Landowners have filed over 7,500 Measure 37 claims in the state. The picture that emerges from this is not one that is consistent with Oregon's planning goals: tens of thousands of dwellings spread around the state but concentrated in the Willamette Valley, including on high value farmland.

Legislation

The Oregon Legislature is considering a bill that would allow voters to decide in November whether to amend Measure 37. This legislation would make it easier to predict the outcomes of Measure 37. If a landowner can show he is entitled to development under Measure 37, he would be granted relatively easy approval for 1-3 dwellings. This could compel claimants currently requesting many units to request only

3 because the process would be much easier. However, this would likely result in 4,000 dwelling units in high value farmland alone based on existing claims.

Marketplace conservation can also be useful in the absence of a catalyst like Measure 37. The Oregon Legislature considered legislative concepts calling for the "winners" to compensate the "losers" of the land use planning system since before Senate Bill 100 passed in 1973 and in the late 70s and early 80s. In Part because the land use program was new, and the concepts complicated, none was enacted. Measure 37, though, has prompted action around new legislation to enable such a state-wide program, perhaps amending the 1999 bill that authorized the Deschutes County TDR program.

II. Overview: How markets can help us achieve conservation and planning objectives

– Adam Davis, Solano Partners

Why use markets

Markets exist so that people pay for the goods and services that they value, at the price at which they value them. With a growing population consuming more and more, things that used to be free are now scarce and are thus more valuable, including ecosystem services (benefits that human beings derive from natural processes). Because they are valued, landowners who preserve or restore them should be compensated.

Such economic transactions are proactive, internalizing the externalities of development, instead of retroactive, taxing ourselves in the future to fix those externalities. Also, rewarding good behavior instead of simply punishing bad behavior may provides extra incentive for preservation.

Which markets

There are many markets for ecosystem services, including wetland and stream banking, conservation banking, easements, sustainable timber, carbon sequestration, and TDRs. These markets have many different names in different parts of the country and the world but they all do the same thing.

The Kyoto Protocol prompted many carbon markets to open, and $30 billion has changed hands in these markets. The European Union has an emissions trading scheme; the California Climate Action Registry gives credits for reforestation and may soon also give credits for managing forests, under the assumption that any techniques that can sequester carbon should be rewarded.

Mitigation banking is written into Section 404 of the Clean Water Act. This program established clear criteria for ecological success, permanent deed restrictions, and financial bonding. One downfall of this program is that on-site mitigation and fee options take away some of the incentives to use the market.

An example of water quality trading is a flood storage credit program at the Sacramento Flood Control Agency. In this program, farmers are paid for flood storage capacity which allows the city to avoid the costs of levee repair. Another example is

Lake Tahoe's coverage markets, which creates incentives to remove impervious surfaces.

Financing

Investment activity translates theory into practice. There are many examples of investment companies willing to invest in conservation. However, the money available for conservation is not enough given the need. Investors can be lured to these markets because there is a reasonable return on their investments.

III. A Primer on Transferable Development Rights: How they have been used, what they've accomplished, and keys to success

– Rick Pruetz, AICP

TDR 101

Transferable development rights work through a community's zoning code. They allow voluntary redirection of growth from an area where development is undesired into an area where development is appropriate. If a sending area landowner decides to participate in a TDR program, local government places a permanent easement on her property. The zoning code specifies how many TDRs she can sell in return for that easement. Receiving area developers, like sending area landowners, can choose whether or not to participate in a TDR program, but communities can create incentives for participation by setting baseline densities at a level below that at which a developer is willing to build. If the developer wants to exceed the allowable density and gain the resulting profits, he can purchase the TDRs.

There are currently at least 172 TDR programs in the county, mainly in high growth areas, and 69 of those are for environmental purposes. About one-third of those programs are thriving, one-third are doing something, and one-third aren't doing anything at all.

Program Profiles

Montgomery County, MD (adjacent to Washington, D.C.), established a TDR program under extreme growth pressure and farmland loss when taxes, grants, and fees were not sufficient to preserve rural land. They created a 90,000 acre agricultural preserve sending area and have preserved 47,000 acres so far without spending any taxpayer money.

King County in Washington State has preserved 92,000 acres, leading the pack. New Jersey's Pinelands program is the most ambitious, with a 1 million acre sending area and 60 jurisdictions mandated by the state to participate. The program has preserved 48,000 acres have with the help of inter-jurisdictional transfers.

Oregon's most successful TDR program is in Deschutes County. Clatsop County has seen one transfer so far, and the City of Portland has moderately successful programs in the Central City, Northwest Hills, and Johnson Creek Planning Districts.

Many more examples of TDR programs can be found in Rick Pruetz's book *Beyond Takings and Givings* as well as on his website: www.beyondtakingsandgivings.com.

Success Factors

1. *Support for the program* Dedicated people must want the program to work. Support from sending area landowners is possible if they want to keep farming but also want to benefit from the development potential of their land, or if they want to achieve equity under regulation. Support from receiving area developers is possible if the only way for them to build at a profitable density is to use the program, or if they identify the flexibility benefits gained from TDR programs. Support from the general public is possible if they recognize the ecological significance of an area.

2. *Sending area motivations* Motivations for a landowner to sell TDRs rather than develop her land include density restrictions, development regulations, physical development restraints, and off-site mitigation requirements.

3. *Receiving area motivations* Developers must want the extra development rights. In this regard, TDRs can be extended incentives beyond density bonuses to include bonus FAR, height, land coverage, etc. Identifying receiving areas where developers want to increase density can also increase incentives.

4. *Desire to exceed baseline density* Jurisdictions can encourage developers to participate in TDR programs by incentivizing smart growth, setting baseline densities at a lower-than-desired levels, and identifying receiving areas where up-zoning is likely to occur, such as in an area that will be incorporated into an urban growth boundary.

5. *TDRs as the only option for extra density* If developers can exceed allowable density through other techniques like providing on-site amenities or requesting up-zoning, they are much less likely to participate in a TDR program.

6. *Affordable TDRs* An assumption that the trading ratio must be 1:1 can make TDRs unaffordable for developers. The market can determine the price at which developers will buy TDRs and the price at which landowners will sell them.

7. *Market adjustments* Just like any product, the value of TDRs will vary through time and space. The value of TDRs to receiving area developers can be estimated by looking at other communities or asking local appraisers or the developers themselves – developers know what they're willing to pay to be able to build one additional unit. Then, they must be charged less than that to create a profit motivation. The value of TDRs to sending area landowners can be estimated by looking at prices paid by land trusts for existing easements in the same or similar communities, appraisals, or talking to landowners.

8. *TDR allocations* The number of TDRs allocated per property can differ based on development potential, zoning, and distance to infrastructure.

9. *Adjust for market differences* The value of a TDR to a developer may differ between receiving sites or type of bonus (height, FAR, etc.).

10. *Treat TDRs as a commodity and use TDR banks* If anyone can buy and hold TDRs, the market is more fluid. Revolving funds allow initial seed money such as tax revenues or grants to be replenished through the buying and selling of TDRs. A TDR

bank can be useful for overcoming initial resistance by stabilizing the market, for demonstrating that the program is funded and success is possible, and for leveraging limited funding.

11. *Monitoring and adjustment programs* If a program is not working as expected or desired, changes in rates or other factors can help it take off. Jurisdictions have updated many of the successful programs more than once.

12. *Tailor the program to the community* For example, incremental TDR may be best for one community, but comprehensive TDR may be best for another. (A comprehensive process takes years but involves all stakeholders and is more likely be to successful because developers have already invested time in it).

13. *Allow inter-jurisdictional transfers* Government can mandate this as in the New Jersey Pinelands and Tahoe region programs or make it voluntary as in Boulder County, CO.

Receiving Areas

There are four basic types of receiving areas: urban infill, urban edges, rural areas, and new towns. All can be intra-jurisdiction or inter-jurisdictional transfers.

Urban infill receiving areas are revitalized and sending areas are restored to their original states if the program is intra-jurisdictional. If inter-jurisdictional, receiving areas such as central cities or transit oriented developments accept extra density and rural areas are preserved. These are good options for areas facing strong development pressures.

Urban edge expansion such as urban growth boundary expansion in Oregon provide viable receiving areas because they are usually zoned at a low density level, preventing the need to down-zone to create development incentive.

Rural area residential developments allow TDRs at a lower density than urban options but provide mechanisms for creating denser town centers and preserving outlying farmland.

New towns, like urban edge expansions, do not require down-zoning and directly mitigates the impact of greenfield development.

IV. Markets for Ecosystem Services: a method for making TDRs work

– Kevin Halsey, Parametrix

What ecosystem services are and why they are a useful concept

Ecosystem services are benefits provided to society by the natural processes of the ecosystem. Understanding the connection between an ecosystem function and its benefit is important because of the environmental and economic consequences if that function breaks down. Defining the human benefits of those functions as "ecosystem services" gives individuals a framework within to which understand, and ultimately value, conservation. Thinking about ecosystem services in a market context then allows us to value them economically as well as symbolically.

This is ultimately a useful concept because it is timely. For example, carbon sequestration is a function that provides climate stabilizing benefits. Market-driven approaches to conservation within a regulatory framework are generally more politically acceptable than are regulatory approaches alone, which often initiate backlash such as Measure 37.

How to develop a market for ecosystem services

The backbone for this market is the public detriment that can come with the private benefits of development. Because on-site mitigation is generally ineffective, markets that allow for permanent off-site preservation are an appealing alternative. Markets can be efficient, effective, and equitable when aligned with natural resource conservation goals. For example, targeting large areas of land for the preservation of ecosystem function is better ecologically than piecemeal on-site mitigation, and offers lower administration and management costs. Incentive programs can encourage developers and landowners to provide public benefits with their dollars and their land.

Existing and future markets in Oregon

Clean Water Services' Water Quality Trading Program, ODOT's Mitigation and Conservation Program, the Willamette Partnership Ecosystem Marketplace, and Oregon Climate Trust are examples of existing ecosystem services markets in Oregon.

Local jurisdictions must provide ecosystem services as mandated by Federal regulatory agencies such as DEQ. It is also in their best interest to do so: if these services are not provided, those jurisdictions must pay. For example, if the function of permeable ground is diminished through an increase in impervious surface coverage, local jurisdictions pay for flood control and clean-up.

Natural Resources Conservation Service (NRCS) will be a driver for ecosystem services markets in the future. No longer allowed by the WTO to subsidize agricultural products, NRCS can create markets that may provide a way to maintain a successful agricultural community where farming is viable. One possibility is encouraging alternate land management strategies such as surrounding a farm with oak woodlands, which has shown to increase crop yields.

V. The Legal Side: What does Oregon law say about TDRs and ecosystem services markets?

– Dick Benner, Metro

The biggest legal question facing TDR implementation is: is it legal? The answer is a lawyer's favorite: it depends.

Several sources of law such as the U.S. Constitution and State Constitutions are relevant to TDRs. If TDRs are used to address takings issues, Constitutional questions may arise. Court cases suggest that TDRs can be used to compensate a potential taking, such as in Penn Central v. New York City. If used to compensate a landowner in

Oregon under Measure 37, the questions are not Constitutional but rather related to valuation equivalency. In this situation, the law is unclear and may vary by locality. An issue that could arise include zoning changes to motivate transfers that are not supported by statewide planning goals such as goal 14, which prevents urban uses on rural lands. Another issue is urban growth boundary expansion to create receiving areas without demonstrating a need for such expansion. In short, challenges to TDR implementation are related to the nature of the receiving areas.

There is nothing explicit in Oregon law to prevent TDR programs from functioning. However, enabling legislation would lay any questions to rest. There are examples of statues and ordinances on APA's website and in Rick Pruetz's books.

VI. Implementing Trading Programs: Examples from Oregon

– Bobby Cochran, Clean Water Services

Clean Water Services has a temperature trading program that allows those who cannot meet temperature input requirements to purchase credits from those who go above and beyond such requirements. This is an example of a market-based system whose design elements are: development of goals, baselines, and limits; definition of a credit; identification of buyers and sellers; outline of exchange methods; and rule-making for governance, monitoring, and enforcement. In order to build such a program, it is important to take an integrated approach because markets do not function perfectly. Whomever makes the rules determines how the market works.

Temperature trading programs offer the hope of mitigating some of the impact of Measure 37 claims. Claims cover 16% of the Tualatin River watershed, where Clean Water Services operates one such program. 30% of the Tualatin River flow is treated wastewater; to offset high temperatures, the program has shaded miles of the river's riparian areas.

Advantages of this program include: ability to be combined with TDRs or other markets to preserve farmland adjacent to the river; maintenance of property rights and production; no requirements of annual benchmarks; and straightforward shade calculations. Challenges in implementing such a program include: negative perceptions towards the regulating agency; fear of government interference; uncertainty; inequality; role confusion; thin markets; high maintenance costs; and assigning liability.

– Catherine Morrow, Deschutes County

Deschutes County has the most successful TDC (transferable development credits, the same thing as transferable development rights) program in Oregon. The program originated in a 1996 project to solve a problem in the La Pine region of the county where hydrologic features were threatened by the potential development 12,000 one-half to two acre lots. In this area, there is a high water table, wildlife habitat,

wildfire potential, and ground water polluted by septic systems. The problem-solving process involved all stakeholders and they ultimately found the solution: a TDC program.

Problem solvers identified the sending area as the 12,000 lots and the receiving area as a neighborhood planning area where a new community was to be built. The TDC program prevented the placement of septic systems in the sending area and required the use of TDCs to develop in the new community. Enabling legislation established the eligibility criteria, which included the caveat that if a landowner was not allowed to have a septic system anyway, he would not be able to sell any TDCs.

Successes of the program included the county's purchase of TDCs for $3000 per credit and stakeholder Pahlisch Homes' building of the first phase of the new neighborhood. Challenges arose when land values increased, making TDCs unaffordable, and when studies showed that the purchase of 1,800 TDCs, the initial goal, would not solve the groundwater pollution problem.

Deschutes County adapted their program to address these problems, one of Rick Pruetz's success factors. The program shifted its focus from TDCs to PRCs, or pollution reduction credits. This gives a PRC to a landowner who updates a septic system using new technology designed to reduce groundwater pollution; again, Pahlisch Homes needs a PRC (instead of a TRC) to develop in the new neighborhood. Pahlisch Homes assists landowners in upgrading their systems.

Successes of the PRC program include additional development in the new neighborhood and the help of realtors to spread the word about the program to homeowners. Challenges include the complexity of the program, which makes it hard to explain to people, a short collective memory regarding the problem-solving process, and refusal to solve future problems today. These challenges have prevented the County from passing a new rule requiring all landowners to update septic systems within 10 years.

Visit www.deschutes.org/cdd for more information.

– Gil Kelley, City of Portland

Portland's Central City TDR program suffers from a gap between the intent of the program and a lag in the market. Planners created the program in the 1980s to stimulate homebuilding when Portland was losing population; the program had no direct relationship to ecosystem services. The program's tools include a 1:1 transfer ratio from site to site within the Central City Planning District and development bonuses such as increased FAR. There are seven circumstances in which the program permits TDRs: none are inter-jurisdictional and all target specific goals such as preservation of single-occupancy housing.

The program's potential is rising with developers' desire to increase density and receive other development bonuses. This translates into an opportunity to update the program with new bonuses and the addition of ecosystem services. With an overhaul of

the Central City Plan beginning in June, now might be the perfect time to reexamine Portland's TDR program.

The biggest challenge in this regard will be convincing neighborhoods to accept increased density in exchange for land preservation at the urban edge. Opportunities exist, however, for creating a regional TDR program, using public sites as receiving areas, and creatively moving beyond FAR and density bonuses to include ecoroofs and end of bicycle trip facilities. With development potential in the South Waterfront and Pearl Districts, the popularity of TDRs is increasing.

VII. Demand and Supply: Will landowners want to sell TDRs and ecosystem services? Who will buy them? Who will act as the banker?

– John Condon
– Dave Williams, ShoreBank Pacific
– Fred Bruning, CenterCal

TDRs show promise for preserving Oregon's livable environment in the face of unprecedented growth. The state's residents show increased interest in green issues such as global warming and retail footprints, increasing the likelihood of success of a statewide TDR program. Landowners are willing to sell TDRs, although one challenge in reselling land with resulting easements is buyer confusion over where those easements came from and why they are there.

Developers, in turn, are willing to swallow the cost of regional growth simply because they can. Portland's relatively cheap housing market and incredible development potential in towns like Gresham promise profit to developers even with the purchase of TDRs. Creating such a statewide program, though, needs to happen now, not in 10 years when it is too late: this will require political will to persevere.

Banks trade time for money. In order to create incentives for a bank to participate in a TDR program, the bank needs: enough buyers and sellers to make the time involved worthwhile; legislation enabling inter-jurisdictional transfers to increase the numbers of buyers and sellers; and an interim process for land management to enforce the conditions of a sale.

VIII. Stump the Panel

– Sheila Martin, Institute of Metropolitan Studies, Moderator
– Rick Pruetz, Adam Davis, Dick Benner, John Condon, Bobby Cochran, Catherine Morrow,
and Kevin Halsey

Should TDRs be a mandatory hurdle for getting into the UGB?

Maybe. Urban reserves increase in value in anticipation of being incorporated into the UGB and landowners experience a gain at the time that their land is designated as urban reserve. To create more receiving areas, we could create an oversupply of potential urban reserves as an alternative to allowing UGB expansion without demonstrated need. However, we need to make sure that these urban reserves are the best places for development; we cannot allow anyone adjacent to a UGB to be a receiving area.

How much flexibility do we have in designating urban reserves?

Not much at the moment. Factors that Metro must consider include infrastructure cost, topology, soil designation, and housing needs.

How do we create a demand for TDRs if there is always a 20-year supply of urban reserve land?

Mandate TDR use. This may require changes in the way that Metro operates their UGB programs because they would have to create a market inefficiency, restricting the land supply so that TDRs could be the only way to get into the UGB.

What is the best way to integrate markets?

Use naturally complementary markets. For example, Deschutes County could use temperature trading credits or carbon trading credits to help pay for unaffordable TDCs. Or, a jurisdiction could make the market more flexible by weighting values according to adjacency of credited parcels.

IX. What opportunities exist in Oregon to make this possible? What needs to change? A panel of Oregon planners:

- Greg Wolf, National Policy Consensus Center, Moderator
- Kent Howe, Lane County
- Doug McClain, Clackamas County
- Catherine Morrow, Deschutes County

First, we need to amend ORS 94 to enable inter-jurisdictional transfers. Second, we need additional pilot programs. Third, we need more education and workshops to spread the word about TDRs, as the collective knowledge about the subject in Oregon is limited. We can take advantage of the Big Look Task Force, Measure 37, and expected growth as catalysts for change.

Specifically, we need a new method for long-range planning, focusing on population redistribution and designating rural areas where we do not want growth. Ironically, Oregon's land use planning system has prevented TDR program implementation: we didn't plan for Measure 37 to create ideal sending areas so we didn't plan any ideal receiving areas and instead up-zoned cities like Portland, encouraging density without the use of TDRs. To this end, we need new goals and new ways to reach them.

Ultimately, these needs are politically charged and this conversation must take place in the political area.